

WHAT IS CLAIMED IS:

1. A method of driving a display, comprising:
  - storing data corresponding to a drive signal input at a first time;
  - modulating a drive signal input at a second time, subsequent to the first time, based upon the stored data so as to facilitate a tone transition from the first time to the second time; and
  - comparing data corresponding to the drive signal input at the first time and data input at a time previous to the first time, wherein a degree of the modulation is adjustable prior to modulating, with reference to the result of the comparison.
2. The method of driving a display as set forth in claim 1, wherein when it is determined, on the basis of the drive signal input at the first time and the drive signal input at the second time that the tone transition from the first time to the second time is insufficient, the degree of modulation is reduced.
3. The method of driving a display as set forth in claim 2, wherein flag information is stored when the determination is made, instructing a process which reduces the degree of the modulation.
4. The method of driving a display as set forth in claim 1,

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wherein when a level of the second drive signal input at the second time is lower than a level of the first drive signal input at the first time, a condition is met and the degree of modulation is reduced.

5. The method of driving a display as set forth in claim 4, wherein flag information is stored when the condition is met, instructing a process which reduces the degree of the modulation.

6. The method of driving a display as set forth in claim 1, wherein

when a level of the second drive signal input at the second time is lower than a level of the first drive signal input at the first time and when the level of the second drive signal indicated by the drive signal input at the second time is at most equal to a predetermined value, a condition is met and the degree of modulation is reduced.

7. The method of driving a display as set forth in claim 6, wherein flag information is stored when the condition is met, instructing a process which reduces the degree of the modulation.

8. The method of driving a display as set forth in claim 1, wherein

when a level of the second drive signal input at the second time is lower than a level of the first drive signal

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input at the first time and when a difference between the level of the first drive signal and the level of the second drive signal is at least equal to a predetermined value, a condition is met and the degree of modulation is reduced.

9. The method of driving a display as set forth in claim 8, wherein flag information is stored when the condition is met, instructing a process which reduces the degree of the modulation.

10. The method of driving a display as set forth in claim 1, wherein

when a level of the second drive signal input at the second time is lower than a level of the first drive signal input at the first time and when a difference between the level of the first drive signal and the level of the second drive signal is at least equal to a mean brightness level over at least a part of a displayed image, multiplied by a substantially constant value, a condition is met and the degree of modulation is reduced.

11. The method of driving a display as set forth in claim 10, wherein flag information is stored when the condition is met, instructing a process which reduces the degree of the modulation.

12. The method of driving a display as set forth in claim 1, wherein

when a level of the second drive signal input at the second time is lower than a level of the first drive signal input at the first time and when a difference between the level of the second drive signal and the level of the first drive signal multiplied by a predetermined coefficient is at least equal to a predetermined level, a condition is met and the degree of modulation is reduced.

13. The method of driving a display as set forth in claim 12, wherein flag information is stored when the condition is met, instructing a process which reduces the degree of the modulation.

14. The method of driving a display as set forth in claim 2, wherein

the degree of the modulation is adjusted such that the drive signal input at the second time is not modulated, to facilitate the tone transition from the first time to the second time, in response to the determination being made.

15. The method of driving a display as set forth in claim 4, wherein

the degree of the modulation is adjusted such that the drive signal input at the second time is not modulated, to facilitate the tone transition from the first time to the second time, in response to the condition being met.

16. The method of driving a display as set forth in claim 6,

wherein

the degree of the modulation is adjusted such that the drive signal input at the second time is not modulated, to facilitate the tone transition from the first time to the second time, in response to the condition being met.

17. The method of driving a display as set forth in claim 8, wherein

the degree of the modulation is adjusted such that the drive signal input at the second time is not modulated, to facilitate the tone transition from the first time to the second time, in response to the condition being met.

18. The method of driving a display as set forth in claim 10, wherein

the degree of the modulation is adjusted such that the drive signal input at the second time is not modulated, to facilitate the tone transition from the first time to the second time, in response to the condition being met.

19. The method of driving a display as set forth in claim 12, wherein

the degree of the modulation is adjusted such that the drive signal input at the second time is not modulated, to facilitate the tone transition from the current time to the desired time, in response to the condition being met.

20. The method of driving a display as set forth in claim 2,

wherein

the degree of the modulation is adjusted such that the drive signal input at the second time is a mean drive signal of a drive signal, corresponding to a case when the drive signal input at the second time is not modulated to facilitate the tone transition from the first time to the second time, and of an unadjusted drive signal, in response to the determination being made.

21. The method of driving a display as set forth in claim 4, wherein

the degree of the modulation is adjusted in the step so that the drive signal input at the second time is a mean drive signal of a drive signal, corresponding to a case when the drive signal input at the second time is not modulated to facilitate the tone transition from the first time to the second time, and an unadjusted drive signal, in response to the condition being met.

22. The method of driving a display as set forth in claim 6, wherein

the degree of the modulation is adjusted in the step so that the drive signal input at the second time is a mean drive signal of a drive signal, corresponding to a case when the drive signal input at the second time is not modulated to facilitate the tone transition from the first time to the second time, and an unadjusted drive signal, in response to the condition being met.

23. The method of driving a display as set forth in claim 8, wherein

the degree of the modulation is adjusted in the step so that the drive signal input at the second time is a mean drive signal of a drive signal, corresponding to a case when the drive signal input at the second time is not modulated to facilitate the tone transition from the first time to the second time, and an unadjusted drive signal, in response to the condition being met.

24. The method of driving a display as set forth in claim 10, wherein

the degree of the modulation is adjusted in the step so that the drive signal input at the second time is a mean drive signal of a drive signal, corresponding to a case when the drive signal input at the second time is not modulated to facilitate the tone transition from the first time to the second time, and an unadjusted drive signal, in response to the condition being met.

25. The method of driving a display as set forth in claim 12, wherein

the degree of the modulation is adjusted in the step so that the drive signal input at the second time is a mean drive signal of a drive signal, corresponding to a case when the drive signal input at the second time is not modulated to facilitate the tone transition from the first time to the

second time, and an unadjusted drive signal, in response to the condition being met.

26. The method of driving a display as set forth in claim 2, wherein

the degree of the modulation is adjusted such that the drive signal input at the second time is a drive signal produced by weight-averaging, with predetermined weights, a drive signal corresponding to a case when the drive signal input at the second time is not modulated to facilitate the tone transition from the first time to the second time and an unadjusted drive signal, in response to the determination being made.

27. The method of driving a display as set forth in claim 26, further comprising:

adjusting the weights in accordance with temperature.

28. The method of driving a display as set forth in claim 27, wherein

the step of adjusting the weights includes retrieving weights that vary in accordance with temperature from a lookup table, in which the weights corresponding to temperature information indicating temperatures are pre-stored.

29. The method of driving a display as set forth in claim 27,

further comprising:

detecting the temperature using a temperature sensor mounted to the display.

30. The method of driving a display as set forth in claim 4, wherein

the degree of the modulation is adjusted such that the drive signal input at the second time is a drive signal produced by weight-averaging, with predetermined weights, a drive signal corresponding to a case when the drive signal input at the second time is not modulated to facilitate the tone transition from the first time to the second time and an unadjusted drive signal, in response to the condition being met.

31. The method of driving a display as set forth in claim 30, further comprising:

adjusting the weights in accordance with temperature.

32. The method of driving a display as set forth in claim 31, wherein

the step of adjusting the weights includes retrieving weights that vary in accordance with temperature from a lookup table, in which the weights corresponding to temperature information indicating temperatures are pre-stored.

33. The method of driving a display as set forth in claim 31, further comprising:

detecting the temperature using a temperature sensor mounted to the display.

34. The method of driving a display as set forth in claim 6, wherein

the degree of the modulation is adjusted such that the drive signal input at the second time is a drive signal produced by weight-averaging, with predetermined weights, a drive signal corresponding to a case when the drive signal input at the second time is not modulated to facilitate the tone transition from the first time to the second time and an unadjusted drive signal, in response to the condition being met.

35. The method of driving a display as set forth in claim 34, further comprising:

adjusting the weights in accordance with temperature.

36. The method of driving a display as set forth in claim 35, wherein

the step of adjusting the weights includes retrieving weights that vary in accordance with temperature from a lookup table, in which the weights corresponding to temperature information indicating temperatures are

pre-stored.

37. The method of driving a display as set forth in claim 35, further comprising:

detecting the temperature using a temperature sensor mounted to the display.

38. The method of driving a display as set forth in claim 8, wherein

the degree of the modulation is adjusted such that the drive signal input at the second time is a drive signal produced by weight-averaging, with predetermined weights, a drive signal corresponding to a case when the drive signal input at the second time is not modulated to facilitate the tone transition from the first time to the second time and an unadjusted drive signal, in response to the condition being met.

39. The method of driving a display as set forth in claim 38, further comprising:

adjusting the weights in accordance with temperature.

40. The method of driving a display as set forth in claim 39, wherein

the step of adjusting the weights includes retrieving weights that vary in accordance with temperature from a lookup table, in which the weights corresponding to

temperature information indicating temperatures are pre-stored.

41. The method of driving a display as set forth in claim 39, further comprising:

detecting the temperature using a temperature sensor mounted to the display.

42. The method of driving a display as set forth in claim 10, wherein

the degree of the modulation is adjusted such that the drive signal input at the second time is a drive signal produced by weight-averaging, with predetermined weights, a drive signal corresponding to a case when the drive signal input at the second time is not modulated to facilitate the tone transition from the first time to the second time and an unadjusted drive signal, in response to the condition being met.

43. The method of driving a display as set forth in claim 42, further comprising:

adjusting the weights in accordance with temperature.

44. The method of driving a display as set forth in claim 43, wherein

the step of adjusting the weights includes retrieving weights that vary in accordance with temperature from a

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lookup table, in which the weights corresponding to temperature information indicating temperatures are pre-stored.

45. The method of driving a display as set forth in claim 43, further comprising:

detecting the temperature using a temperature sensor mounted to the display.

46. The method of driving a display as set forth in claim 12, wherein

the degree of the modulation is adjusted such that the drive signal input at the second time is a drive signal produced by weight-averaging, with predetermined weights, a drive signal corresponding to a case when the drive signal input at the second time is not modulated to facilitate the tone transition from the first time to the second time and an unadjusted drive signal, in response to the condition being met.

47. The method of driving a display as set forth in claim 46, further comprising:

adjusting the weights in accordance with temperature.

48. The method of driving a display as set forth in claim 47, wherein

the step of adjusting the weights includes retrieving

weights that vary in accordance with temperature from a lookup table, in which the weights corresponding to temperature information indicating temperatures are pre-stored.

49. The method of driving a display as set forth in claim 47, further comprising:

detecting the temperature using a temperature sensor mounted to the display.

50. The method of driving a display as set forth in claim 2, wherein:

the step of modulating includes modulating the drive signal input at the second time with reference to one of a plurality of lookup tables, in which modulation information, according to which the drive signal input at the second time is modulated and which corresponds to respective combinations of the drive signal input at the first time and the drive signal input at the second time, is pre-stored; and wherein adjustability of the modulation includes selecting one of the lookup tables to be referenced in accordance with whether the determination is made.

51. The method of driving a display as set forth in claim 4, wherein:

the step of modulating includes modulating the drive signal input at the second time with reference to one of a plurality of lookup tables, in which modulation information,

according to which the drive signal input at the second time is modulated and which corresponds to respective combinations of the drive signal input at the first time and the drive signal input at the second time, is pre-stored; and wherein adjustability of the modulation includes selecting one of the lookup tables to be referenced in accordance with whether the condition is met.

52. The method of driving a display as set forth in claim 6, wherein:

the step of modulating includes modulating the drive signal input at the second time with reference to one of a plurality of lookup tables, in which modulation information, according to which the drive signal input at the second time is modulated and which corresponds to respective combinations of the drive signal input at the first time and the drive signal input at the second time, is pre-stored; and wherein adjustability of the modulation includes selecting one of the lookup tables to be referenced in accordance with whether the condition is met.

53. The method of driving a display as set forth in claim 8, wherein:

the step of modulating includes modulating the drive signal input at the second time with reference to one of a plurality of lookup tables, in which modulation information, according to which the drive signal input at the second time is modulated and which corresponds to respective

combinations of the drive signal input at the first time and the drive signal input at the second time, is pre-stored; and wherein adjustability of the modulation includes selecting one of the lookup tables to be referenced in accordance with whether the condition is met.

54. The method of driving a display as set forth in claim 10, wherein:

the step of modulating includes modulating the drive signal input at the second time with reference to one of a plurality of lookup tables, in which modulation information, according to which the drive signal input at the second time is modulated and which corresponds to respective combinations of the drive signal input at the first time and the drive signal input at the second time, is pre-stored; and wherein adjustability of the modulation includes selecting one of the lookup tables to be referenced in accordance with whether the condition is met.

55. The method of driving a display as set forth in claim 12, wherein:

the step of modulating includes modulating the drive signal input at the second time with reference to one of a plurality of lookup tables, in which modulation information, according to which the drive signal input at the second time is modulated and which corresponds to respective combinations of the drive signal input at the first time and the drive signal input at the second time, is pre-stored; and

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wherein adjustability of the modulation includes selecting one of the lookup tables to be referenced in accordance with whether the condition is met.

56. The method of driving a display as set forth in claim 3, wherein

when the flag information instructs the process, and a combination of the drive signal input at the first time and the drive signal input at the second time is a predetermined combination, the modulation adjustment is performed.

57. The method of driving a display as set forth in claim 56, wherein

the modulation adjustment includes determining whether the combination of the drive signal at the first time and the drive signal at the second time is the predetermined combination with reference to a lookup table in which information, corresponding to respective combinations of the drive signal at the first time and the drive signal at the second time, and according to which a determination is made as to whether the combination is the predetermined combination, is pre-stored.

58. The method of driving a display as set forth in claim 5, wherein

when the flag information instructs the process, and a combination of the drive signal input at the first time and

the drive signal input at the second time is a predetermined combination, the modulation adjustment is performed.

59. The method of driving a display as set forth in claim 58, wherein

the modulation adjustment includes determining whether the combination of the drive signal at the first time and the drive signal at the second time is the predetermined combination with reference to a lookup table in which information, corresponding to respective combinations of the drive signal at the first time and the drive signal at the second time, and according to which a determination is made as to whether the combination is the predetermined combination, is pre-stored.

60. The method of driving a display as set forth in claim 7, wherein

when the flag information instructs the process, and a combination of the drive signal input at the first time and the drive signal input at the second time is a predetermined combination, the modulation adjustment is performed.

61. The method of driving a display as set forth in claim 60, wherein

the modulation adjustment includes determining

whether the combination of the drive signal at the first time and the drive signal at the second time is the predetermined combination with reference to a lookup table in which information, corresponding to respective combinations of the drive signal at the first time and the drive signal at the second time, and according to which a determination is made as to whether the combination is the predetermined combination, is pre-stored.

62. The method of driving a display as set forth in claim 9, wherein

when the flag information instructs the process, and a combination of the drive signal input at the first time and the drive signal input at the second time is a predetermined combination, the modulation adjustment is performed.

63. The method of driving a display as set forth in claim 62, wherein

the modulation adjustment includes determining whether the combination of the drive signal at the first time and the drive signal at the second time is the predetermined combination with reference to a lookup table in which information, corresponding to respective combinations of the drive signal at the first time and the drive signal at the second time, and according to which a determination is made as to whether the combination is the predetermined combination, is pre-stored.

64. The method of driving a display as set forth in claim 11, wherein

when the flag information instructs the process, and a combination of the drive signal input at the first time and the drive signal input at the second time is a predetermined combination, the modulation adjustment is performed.

65. The method of driving a display as set forth in claim 64, wherein

the modulation adjustment includes determining whether the combination of the drive signal at the first time and the drive signal at the second time is the predetermined combination with reference to a lookup table in which information, corresponding to respective combinations of the drive signal at the first time and the drive signal at the second time, and according to which a determination is made as to whether the combination is the predetermined combination, is pre-stored.

66. The method of driving a display as set forth in claim 13, wherein

when the flag information instructs the process, and a combination of the drive signal input at the first time and the drive signal input at the second time is a predetermined combination, the modulation adjustment is

performed.

67. The method of driving a display as set forth in claim 66, wherein

the modulation adjustment includes determining whether the combination of the drive signal at the first time and the drive signal at the second time is the predetermined combination with reference to a lookup table in which information, corresponding to respective combinations of the drive signal at the first time and the drive signal at the second time, and according to which a determination is made as to whether the combination is the predetermined combination, is pre-stored.

68. The method of driving a display as set forth in claim 5, wherein

the process is performed when the flag information instructs the process, and when the level of the second drive signal is lower than the level of the first drive signal.

69. The method of driving a display as set forth in claim 7, wherein

the process is performed when the flag information instructs the process, and when the level of the second drive signal is lower than the level of the first drive signal.

70. The method of driving a display as set forth in claim 9, wherein

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the process is performed when the flag information instructs the process, and when the level of the second drive signal is lower than the level of the first drive signal.

71. The method of driving a display as set forth in claim 11, wherein

the process is performed when the flag information instructs the process, and when the level of the second drive signal is lower than the level of the first drive signal.

72. The method of driving a display as set forth in claim 13, wherein

the process is performed when the flag information instructs the process, and when the level of the second drive signal is lower than the level of the first drive signal.

73. The method of driving a display as set forth in claim 3, wherein:

a specialized process at multiple discrete levels, which reduce the degree of the modulation differently from one another, is performed as the process;

the flag information is expressed by at least two bits; and

when flag information instructing for a process is stored, flag information indicating one of the levels with which the process is to be performed is stored.

74. The method of driving a display as set forth in claim 73,

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further comprising the step of:

determining whether a displayed image is a still image,

wherein

when flag information instructing for a process at one of the levels has been stored for the drive signal input at the first time, flag information indicating a relatively higher level at which tone transition is facilitated is stored as a result of comparison for the drive signal input at the second time.

75. The method of driving a display as set forth in claim 73, further comprising the step of:

determining whether a displayed image is a still image,

wherein

when flag information instructing for a process at one of the levels has been stored for the drive signal input at the first time, and when it is determined that the image is a still image, flag information indicating a relatively higher level at which tone transition is facilitated is stored as a result of comparison for the drive signal input at the second time.

76. The method of driving a display as set forth in claim 5, wherein:

a specialized process at multiple discrete levels, which reduce the degree of the modulation differently from

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one another, is performed as the process;

the flag information is expressed by at least two bits;  
and

when flag information instructing for a process is stored, flag information indicating one of the levels with which the process is to be performed is stored.

77. The method of driving a display as set forth in claim 76, further comprising the step of:

determining whether a displayed image is a still image,

wherein

when flag information instructing for a process at one of the levels has been stored for the drive signal input at the first time, flag information indicating a relatively higher level at which tone transition is facilitated is stored as a result of comparison for the drive signal input at the second time.

78. The method of driving a display as set forth in claim 76, further comprising the step of:

determining whether a displayed image is a still image,

wherein

when flag information instructing for a process at one of the levels has been stored for the drive signal input at the first time, and when it is determined that the image is a still image, flag information indicating a relatively higher

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level at which tone transition is facilitated is stored as a result of comparison for the drive signal input at the second time.

79. The method of driving a display as set forth in claim 7, wherein:

a specialized process at multiple discrete levels, which reduce the degree of the modulation differently from one another, is performed as the process;

the flag information is expressed by at least two bits; and

when flag information instructing for a process is stored, flag information indicating one of the levels with which the process is to be performed is stored.

80. The method of driving a display as set forth in claim 79, further comprising the step of:

determining whether a displayed image is a still image,

wherein

when flag information instructing for a process at one of the levels has been stored for the drive signal input at the first time, flag information indicating a relatively higher level at which tone transition is facilitated is stored as a result of comparison for the drive signal input at the second time.

81. The method of driving a display as set forth in claim 79,

further comprising the step of:

determining whether a displayed image is a still image,

wherein

when flag information instructing for a process at one of the levels has been stored for the drive signal input at the first time, and when it is determined that the image is a still image, flag information indicating a relatively higher level at which tone transition is facilitated is stored as a result of comparison for the drive signal input at the second time.

82. The method of driving a display as set forth in claim 9, wherein:

a specialized process at multiple discrete levels, which reduce the degree of the modulation differently from one another, is performed as the process;

the flag information is expressed by at least two bits; and

when flag information instructing for a process is stored, flag information indicating one of the levels with which the process is to be performed is stored.

83. The method of driving a display as set forth in claim 82, further comprising the step of:

determining whether a displayed image is a still image,

wherein

when flag information instructing for a process at one of the levels has been stored for the drive signal input at the first time, flag information indicating a relatively higher level at which tone transition is facilitated is stored as a result of comparison for the drive signal input at the second time.

84. The method of driving a display as set forth in claim 82, further comprising the step of:

determining whether a displayed image is a still image,

wherein

when flag information instructing for a process at one of the levels has been stored for the drive signal input at the first time, and when it is determined that the image is a still image, flag information indicating a relatively higher level at which tone transition is facilitated is stored as a result of comparison for the drive signal input at the second time.

85. The method of driving a display as set forth in claim 11, wherein:

a specialized process at multiple discrete levels, which reduce the degree of the modulation differently from one another, is performed as the process;

the flag information is expressed by at least two bits; and

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when flag information instructing for a process is stored, flag information indicating one of the levels with which the process is to be performed is stored.

86. The method of driving a display as set forth in claim 85, further comprising the step of:

determining whether a displayed image is a still image,

wherein

when flag information instructing for a process at one of the levels has been stored for the drive signal input at the first time, flag information indicating a relatively higher level at which tone transition is facilitated is stored as a result of comparison for the drive signal input at the second time.

87. The method of driving a display as set forth in claim 85, further comprising the step of:

determining whether a displayed image is a still image,

wherein

when flag information instructing for a process at one of the levels has been stored for the drive signal input at the first time, and when it is determined that the image is a still image, flag information indicating a relatively higher level at which tone transition is facilitated is stored as a result of comparison for the drive signal input at the second time.

88. The method of driving a display as set forth in claim 13, wherein:

a specialized process at multiple discrete levels, which reduce the degree of the modulation differently from one another, is performed as the process;

the flag information is expressed by at least two bits; and

when flag information instructing for a process is stored, flag information indicating one of the levels with which the process is to be performed is stored.

89. The method of driving a display as set forth in claim 88, further comprising the step of:

determining whether a displayed image is a still image,

wherein

when flag information instructing for a process at one of the levels has been stored for the drive signal input at the first time, flag information indicating a relatively higher level at which tone transition is facilitated is stored as a result of comparison for the drive signal input at the second time.

90. The method of driving a display as set forth in claim 88, further comprising the step of:

determining whether a displayed image is a still image,

wherein

when flag information instructing for a process at one of the levels has been stored for the drive signal input at the first time, and when it is determined that the image is a still image, flag information indicating a relatively higher level at which tone transition is facilitated is stored as a result of comparison for the drive signal input at the second time.

91. The method of driving a display as set forth in claim 1, wherein

when a level of a second drive signal input at a second time is relatively higher than a level of a first drive signal input at a first time and when it is determined that the tone transition from the first time to the second time is insufficient on the basis of both drive signals, flag information instructing a process which reduces the degree of the modulation is stored as the result of the comparison.

92. The method of driving a display as set forth in claim 1, wherein

the display includes a liquid crystal display element of normally black mode as a display element.

93. The method of driving a display as set forth in claim 1, wherein

the display includes a liquid crystal display element of vertical alignment mode and normally black mode as a

display element.

94. The method of driving a display as set forth in claim 1, wherein:

the second time corresponds to a second frame period;

the first time corresponds to a frame period immediately before the second frame period; and

the previous time corresponds to a frame period before the first frame period.

95. A display, comprising:

memory means for storing data of a drive signal input at a first time;

modulation means for modulating a drive signal input at a second time, subsequent to the first time, based upon the stored data so as to facilitate a tone transition from the first time to the second time;

comparison result memory means for storing a result of a comparison of the stored data corresponding to the drive signal input at the first time and data input at a time previous to the first time; and

adjusting means for adjusting a degree of the modulating by the modulation means with reference to the result of the comparison stored in the comparison result memory means.

96. The display as set forth in claim 95, further comprising

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a liquid crystal display element of vertical alignment mode and normally black mode.

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97. A drive signal processor for processing a display drive signal, comprising:

memory means for storing data of a drive signal input at a first time;

modulation means for modulating a drive signal input at a second time, subsequent to the first time, based upon the stored data so as to facilitate a tone transition from the first time to the second time;

comparison result memory means for storing a result of a comparison of the stored data corresponding to the drive signal input at the first time and data input at a time previous to the first time; and

adjusting means for adjusting a degree of the modulating by the modulation means with reference to the result of the comparison stored in the comparison result memory means.

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98. A program, adapted to cause a computer to execute the steps of:

storing data corresponding to a drive signal input at a first time;

modulating a drive signal input at a second time, subsequent to the first time, based upon the stored data so as to facilitate a tone transition from the first time to the second time;

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comparing data corresponding to the drive signal input at the first time and data input at a time previous to the first time, wherein a degree of the modulation is adjusted prior to modulating, with reference to the result of the comparison.

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99. A computer-readable storage medium, on which is recorded a program adapted to cause a computer to execute the steps of:

storing data corresponding to a drive signal input at a first time;

modulating a drive signal input at a second time, subsequent to the first time, based upon the stored data so as to facilitate a tone transition from the first time to the second time;

comparing data corresponding to the drive signal input at the first time and data input at a time previous to the first time, wherein a degree of the modulation is adjusted prior to modulating, with reference to the result of the comparison.

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100. A display, comprising:

a first storage for storing data corresponding to a drive signal input at a first time;

a modulator for modulating a drive signal input at a second time, subsequent to the first time, based upon the stored data so as to facilitate a tone transition from the first time to the second time;

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a second storage for storing a result of a comparison of the stored data corresponding to the drive signal input at the first time and data input at a time previous to the first time; and

an adjuster for adjusting a degree of the modulating by the modulator with reference to the result of the comparison stored in the second storage.

101. A method of driving a display, comprising:

determining a display drive signal based on desired drive signal data and current corresponding drive signal data; and

driving the display with a selected one of the determined display drive signal and a variation of the determined display drive signal, selected based upon at least a previous corresponding drive signal data and the current drive signal data.

102. The method of driving a display of claim 101, wherein the current corresponding drive signal data includes data from a drive signal input at a first time, the desired drive signal data includes data from a drive signal input at a second time, subsequent to the first time, and the previous corresponding drive signal data includes data from a drive signal input at a time previous to the first time.

103. The method of driving a display as set forth in claim 102, wherein when it is determined, on the basis of the

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drive signal input at the first time and the drive signal input at the second time, that a tone transition from the first time to the second time is insufficient, a degree of the variation is reduced.

104. The method of driving a display as set forth in claim 103, wherein flag information is stored when the determination is made, instructing a process which reduces the degree of the variation.

105. The method of driving a display as set forth in claim 102, wherein when a level of the second drive signal input at the second time is lower than a level of the first drive signal input at the first time, a condition is met and a degree of variation is reduced.

106. The method of driving a display as set forth in claim 105, wherein flag information is stored when the condition is met, instructing a process which reduces the degree of variation.

107. The method of driving a display as set forth in claim 102, wherein

when a level of the second drive signal input at the second time is lower than a level of the first drive signal input at the first time and when the level of the second drive signal input at the second time is at most equal to a predetermined value, a condition is met and a degree of

variation is reduced.

108. The method of driving a display as set forth in claim 107, wherein flag information is stored when the condition is met, instructing a process which reduces the degree of variation.

109. The method of driving a display as set forth in claim 102, wherein

when a level of the second drive signal input at the second time is lower than a level of the first drive signal input at the first time and when a difference between the level of the first drive signal and the level of the second drive signal is at least equal to a predetermined value, a condition is met and a degree of variation is reduced.

110. The method of driving a display as set forth in claim 109, wherein flag information is stored when the condition is met, instructing a process which reduces the degree of variation.

111. The method of driving a display as set forth in claim 102, wherein

when a level of the second drive signal input at the second time is lower than a level of the first drive signal input at the first time and when a difference between the level of the first drive signal and the level of the second drive signal is at least equal to a mean brightness level

over at least a part of a displayed image, multiplied by a substantially constant value, a condition is met and a degree of variation is reduced.

112. The method of driving a display as set forth in claim 111, wherein flag information is stored when the condition is met, instructing a process which reduces the degree of variation.

113. The method of driving a display as set forth in claim 102, wherein

when a level of the second drive signal input at the second time is lower than a level of the first drive signal input at the first time and when a difference between the level of the second drive signal and the level of the first drive signal multiplied by a predetermined coefficient is at least equal to a predetermined level, a condition is met and a degree of variation is reduced.

114. The method of driving a display as set forth in claim 113, wherein flag information is stored when the condition is met, instructing a process which reduces the degree of variation.

114. A program, adapted to cause a computer to execute the method of claim 101.

115. A program, adapted to cause a computer to execute

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the method of claim 102.

116. A computer-readable storage medium, on which is recorded a program adapted to cause a computer to execute the method of claim 101.

117. A program, adapted to cause a computer to execute the method of claim 102.

118. A display, comprising:

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means for determining a display drive signal based on desired drive signal data and current corresponding drive signal data; and

means for driving the display with a selected one of the determined display drive signal and a variation of the determined display drive signal, selected based upon at least a previous corresponding drive signal data and the current drive signal data.

119. The display of claim 118, further comprising memory means for storing the desired drive signal data and current corresponding drive signal data.

120. The display of claim 119, further comprising comparison result memory means for storing a result of a comparison of at least a previous corresponding drive signal data and the current drive signal data.

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121. The display of claim 120, further comprising  
adjusting means for adjusting a degree of the  
variation with reference to the result of the comparison  
stored in the comparison result memory means.

122. The display of claim 118, wherein the current  
corresponding drive signal data includes data from a drive  
signal input at a first time, the desired drive signal data  
includes data from a drive signal input at a second time,  
subsequent to the first time, and the previous  
corresponding drive signal data includes data from a drive  
signal input at a time previous to the first time.

123. The display as set forth in claim 118, further  
comprising a liquid crystal display element of vertical  
alignment mode and normally black mode.

124. A drive signal processor for processing a display drive  
signal, comprising:

means for determining a display drive signal based on  
desired drive signal data and current corresponding drive  
signal data; and

means for driving the display with a selected one of  
the determined display drive signal and a variation of the  
determined display drive signal, selected based upon at  
least a previous corresponding drive signal data and the  
current drive signal data.

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125. The drive signal processor of claim 124, further comprising memory means for storing the desired drive signal data and current corresponding drive signal data.

126. The drive signal processor of claim 125, further comprising comparison result memory means for storing a result of a comparison of at least a previous corresponding drive signal data and the current drive signal data.

127. The drive signal processor of claim 126, further comprising

adjusting means for adjusting a degree of the variation with reference to the result of the comparison stored in the comparison result memory means.

128. The drive signal processor of claim 124, wherein the current corresponding drive signal data includes data from a drive signal input at a first time, the desired drive signal data includes data from a drive signal input at a second time, subsequent to the first time, and the previous corresponding drive signal data includes data from a drive signal input at a time previous to the first time.

129. The drive signal processor as set forth in claim 124, further comprising a liquid crystal display element of vertical alignment mode and normally black mode.

130. A display, comprising:

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a processor, adapted to determine a display drive signal based on desired drive signal data and current corresponding drive signal data; and

a selector, adapted to select a drive signal for driving the display from one of the determined display drive signal and a variation of the determined display drive signal, the selection being based upon at least a previous corresponding drive signal data and the current drive signal data.

131. The display of claim 130, further comprising:

a second processor, coupled to the selector, adapted to create the variation of the determined drive signal.

132. The display of claim 130, further comprising a memory, coupled to the processor, for storing the current corresponding drive signal data.

133. The display of claim 130, wherein the current corresponding drive signal data includes data from a drive signal input at a first time, the desired drive signal data includes data from a drive signal input at a second time, subsequent to the first time, and the previous corresponding drive signal data includes data from a drive signal input at a time previous to the first time.